

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) An intervertebral prosthesis for implantation between adjacent vertebrae of the human spine, comprising:

a unitary body that is banana-shaped as viewed from above, the unitary body having an exterior surface and an interior surface, the interior surface defining an interior recess;

the unitary body defining openings that are evenly spaced about a circumference of the unitary body; and

wherein the banana shape of the unitary body includes a front arc that has a first radius of curvature and a back arc that includes a second radius of curvature.

2. (Canceled)

3. (Previously Presented) The intervertebral prosthesis of Claim 1 wherein the first radius of curvature is equal to or less than the second radius of curvature.

4. (Canceled)

5. (Original) The intervertebral prosthesis of Claim 3, wherein the first radius of curvature is less than the second radius of curvature.

6. (Original) The intervertebral prosthesis of Claim 5, wherein the first and the second radii of curvature extend from a single point of rotation.

7-9. (Canceled)

10. (Previously Presented) The intervertebral prosthesis of Claim 1, wherein the defined openings are quadrilaterals.

11. (Previously Presented) The intervertebral prosthesis of Claim 10, wherein the quadrilaterals are parallelograms.

12. (Previously Presented) The intervertebral prosthesis of Claim 11, wherein the parallelograms are rhombuses.

13. (Previously Presented) The intervertebral prosthesis of Claim 1, wherein the body of the intervertebral prosthesis includes at least one material selected from the group consisting of a metal, a carbon fiber, and a polymer.

14. (Previously Presented) The intervertebral prosthesis of Claim 13, wherein the body of the intervertebral prosthesis includes a metal.

15. (Original) The intervertebral prosthesis of Claim 14, wherein the metal includes at least one member selected from the group consisting of titanium and metal alloy.

16. (Original) The intervertebral prosthesis of Claim 15, wherein the metal includes a metal alloy.

17. (Original) The intervertebral prosthesis of Claim 16, wherein the metal alloy is a stainless steel.

18. (Previously Presented) The intervertebral prosthesis of Claim 13, wherein the body of the intervertebral prosthesis includes a carbon fiber.

19. (Previously Presented) The intervertebral prosthesis of Claim 13, wherein the body of the intervertebral prosthesis includes a polymer.

20. (Original) The intervertebral prosthesis of Claim 19, wherein the polymer is a bioreabsorbable polymer.

21. (Previously Presented) The intervertebral prosthesis of Claim 20, wherein the bioreabsorbable polymer includes at least one member selected from the group consisting of polyglycolic acid and polylactic acid.

22. (Previously Presented) The intervertebral prosthesis of Claim 19, wherein the polymer includes polymethylmethacrylate.

23. (Previously Presented) The intervertebral prosthesis of Claim 22, wherein the polymethylmethacrylate is blended with an antibiotic.

24. (Original) The intervertebral prosthesis of Claim 13, wherein the intervertebral prosthesis has a width in a range of between about 24 mm and about 28 mm.

25. (Original) The intervertebral prosthesis of Claim 24, wherein the intervertebral prosthesis has a length in a range of between about 8 mm and about 10 mm.

26. (Original) The intervertebral prosthesis of Claim 25, wherein the intervertebral prosthesis has a height in a range of between about 10 mm and about 16 mm.

27. (Original) The intervertebral prosthesis of Claim 26, wherein the front arc of the prosthesis has a thickness in a range of between about 1.5 mm and about 2 mm.

28. (Previously Presented) The intervertebral prosthesis of Claim 1, wherein the front arc and the back arc are continuous.

29. (Previously Presented) The intervertebral prosthesis of Claim 1, wherein the unitary body includes upper and lower edges that each form smoothly-sloping surfaces, said upper and lower edges including bands that form a serpentine arrangement of an interlinked mesh.

30. (Previously Presented) The intervertebral prosthesis of Claim 1, wherein the banana-shape of the unitary body includes a width and length wherein the width is at least 2.4 times greater than the length.

31. (Previously Presented) The intervertebral prosthesis of Claim 30, wherein the length is in a range of between about 8 mm and about 10 mm.

32. (New) An intervertebral prosthesis for implantation between adjacent vertebrae of the human spine, comprising:

a unitary body in the form of a curved ring, the unitary body having an exterior surface and an interior surface, the interior surface defining an interior recess; and

the unitary body defining openings about a circumference of the unitary body;

wherein the curved ring includes a front arc that has a first radius of curvature and a back arc that is curved in the same direction as the front arc and includes a second radius of curvature;

wherein the curved ring includes a width and length wherein the width is at least 2.4 times greater than the length.

33. (New) The intervertebral prosthesis of claim 32, wherein the first radius of curvature is equal to or less than the second radius of curvature.

34. (New) The intervertebral prosthesis of claim 32, wherein the first radius of curvature is less than the second radius of curvature.

35. (New) The intervertebral prosthesis of claim 32, wherein the first and the second radii of curvature extend from a single point of rotation.

36. (New) The intervertebral prosthesis of claim 32, wherein the intervertebral prosthesis has a width in a range of between about 24 mm and about 28 mm.

37. (New) The intervertebral prosthesis of claim 36, wherein the intervertebral prosthesis has a length in a range of between about 8 mm and about 10 mm.

38. (New) The intervertebral prosthesis of claim 37, wherein the intervertebral prosthesis has a height in a range of between about 10 mm and about 16 mm.

39. (New) The intervertebral prosthesis of claim 38, wherein the front arc of the prosthesis has a thickness in a range of between about 1.5 mm and about 2 mm.

40. (New) The intervertebral prosthesis of claim 32, wherein the defined openings are quadrilaterals.

41. (New) The intervertebral prosthesis of claim 40, wherein the quadrilaterals are parallelograms.

42. (New) The intervertebral prosthesis of Claim 41, wherein the parallelograms are rhombuses.

43. (New) The intervertebral prosthesis of claim 32, wherein the body of the intervertebral prosthesis includes at least one material selected from the group consisting of a metal, a carbon fiber, and a polymer.

44. (New) The intervertebral prosthesis of claim 32, wherein the body of the intervertebral prosthesis includes a carbon fiber.